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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,736	11/20/2003	Scott E. Black	BOI - 0019US	8708

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LEE & HAYES, PLLC
421 W. RIVERSIDE AVE.
SUITE 500
SPOKANE, WA 99201

EXAMINER

LAU, TUNG S

ART UNIT	PAPER NUMBER
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2863

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/717,736

Applicant(s)

BLACK ET AL.

Examiner

Tung S. Lau

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 18-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/29/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/29/2007 has been entered.

Election/Restrictions

2. Claims 18-23 stand withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention as noted on 05/18/2006.

Specification Objection

3. The abstract of the disclosure is objected to because it contains the title of the invention. The heading on the abstract should only read 'Abstract' or 'Abstract of the Disclosure'. Correction is required. See MPEP 608.01(b).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-13 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Germanetti (U.S. Patent 6,400,282, Date of Patent Jun. 4, 2002).

Regarding claim 1:

Germanetti describes a method of operating a product, comprising: monitoring a first diagnostic information of a component of the product (abstract); monitoring a second diagnostic information of a system of the product (Col. 2, Lines 53-62), the system including the component (Col. 2, Lines 57) wherein the second diagnostic information (Col. 2, Lines 55, this case is a battery temperature probe) does not include the first diagnostic information (Col. 2, Lines 56, this case is an additional fuel tank info, independent of the first information fed to the system) ; combining the first diagnostic information of the component and the second diagnostic information of the system (Col. 2-3, Lines 64-12); and based at least partially on the combined first and second diagnostic information, reconfiguring at least one of the component and the system (Col. 3, Lines 14-39).

Regarding claim 2, Germanetti further describes monitoring a first diagnostic information of a component includes monitoring a health indication of the component (Col. 3, Lines 55-59).

Regarding claim 3, Germanetti further describes monitoring a first diagnostic information of a component includes monitoring a capability indication of the component (Col. 3, Lines 55-59).

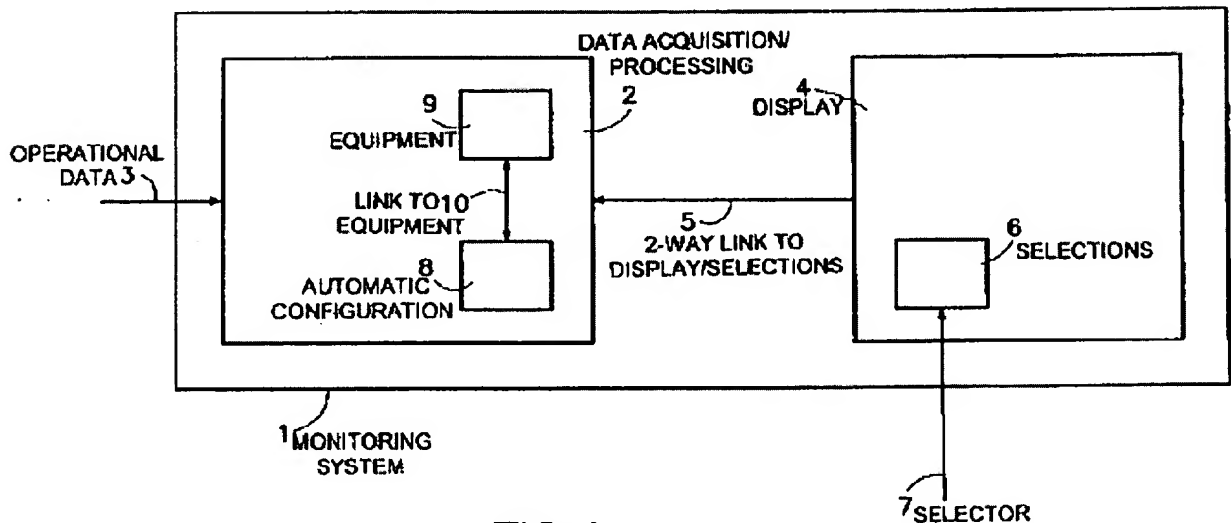


FIG. 1

Regarding claim 4, Germanetti further describes monitoring a first diagnostic information of a component includes monitoring a reliability indication of the component (Col. 3-4, Lines 66-5).

Regarding claim 5, Germanetti further describes monitoring a information of a component includes monitoring a first diagnostic information of an actuator (Col. 4, Lines 18-31).

Regarding claim 6, Germanetti further describes monitoring a second diagnostic information of a system includes monitoring a health indication of the system (Col. 3, Lines 55-59).

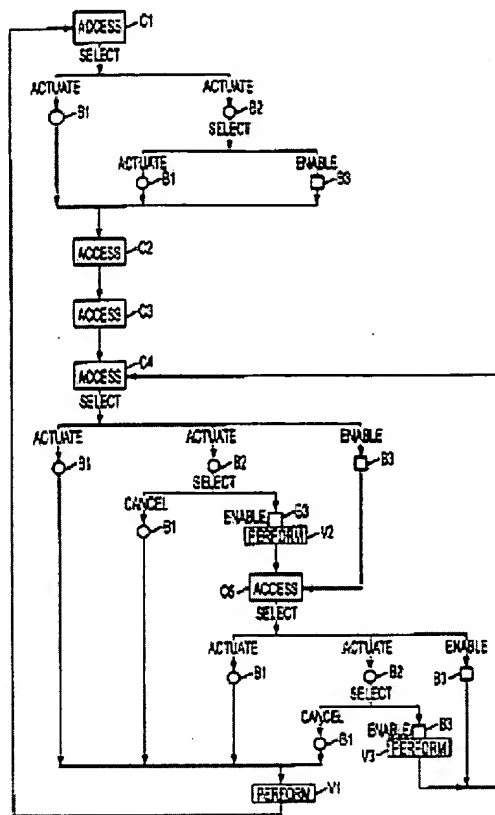


FIG. 2

Regarding claim 7, Germanetti further describes monitoring a second diagnostic information of a component includes monitoring a capability indication of the component (Col. 3, Lines 55-59).

Regarding claim 8, Germanetti further describes monitoring a second diagnostic information of a component includes monitoring a reliability indication of the component (Col. 3-4, Lines 66-5).

Regarding claim 9, Germanetti further describes monitoring a second diagnostic information of a system includes monitoring a second diagnostic information of a flight control system (Col. 4, Lines 36-8).

Regarding claim 10, Germanetti further describes reconfiguring at least one of the component and the system includes reconfiguring a flight control system to take into account a degradation of an actuator (Col. 3, Lines 55-59, realtime info. Including current status and degradation info).

Regarding claim 11, Germanetti further describes feeding back the reconfiguring of the at least one of the component and the system into the fusion of the first and second diagnostic information (fig. 1, unit 8).

Regarding claim 12, Germanetti further describes inputting the combined first and second diagnostic information into a maintenance support block (Col. 2, Lines 56-64, fig. 1, unit 2).

Regarding claim 13, Germanetti further describes inputting the combined first and second diagnostic information into a maintenance support block includes inputting the combined first and second diagnostic information into the maintenance support block to at least one of enable post-flight analysis and

interpretation, and assist in assessing the prognosis of the component and system (Col. 3, Lines 13-39).

Regarding claim 16, Germanetti further describes reconfiguring at least one of the component and the system includes reconfiguring at least one of the component and the system using an integrated vehicle health management system (fig. 1, unit 2, Col. 3, Lines 55-59).

Regarding claim 17, Germanetti further describes integrating an integrated vehicle health management system will reconfigurable control, and performing tests of at least one of the component and the system during actual operation of the product (Col. 3, Lines 13-39).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

a. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Germanetti (U.S. Patent 6,400,282) in view of Board et al. (U.S. Patent 6,351,713).

Regarding claim 14, Germanetti describes a method including the subject matter discussed above except to reduce false alarm in a build in test system,

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Board describes to reduce false alarm in a build in test system (Col. 3, Lines 1-11), in order to maximize fault detection probability (Col. 3, Lines 1-4), and increase reliability of the helicopter (Col. 2, Lines 47-53, Col. 3, Lines 1-11).

Regarding claim 15, Germanetti describes a trending one or more degradation to provide a prognostic capability (Col. 3, Lines 55-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Germanetti to reduce false alarm in a build in test system taught by Board in order to maximize fault detection probability and increase reliability of the helicopter.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Germanetti and Board are analogous art because they are from the same field of endeavor, detecting faulty system in a helicopter.

Response to Arguments

6. Applicant's arguments with respect to the amended claims have been considered but are moot in view of the new ground(s) of rejection. However, applicant's arguments filed 01/29/2007 have been fully considered but they are not persuasive.

Contact information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung S Lau whose telephone number is 571-272-2274. The examiner can normally be reached on M-F 9-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone numbers for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tung S. Lau/

Tung S. Lau
AU 2863, Patent examiner, February 12, 2007